



## MANUAL CHAIN HOISTS and TROLLEYS Intended for use in Potentially Explosive Atmospheres

The EC Declaration of Conformity in this manual states that these manual chain hoist and trolley models are in compliance with European Community Directive 94/9/EC for equipment intended for use in potentially explosive atmospheres, commonly referred to as the ATEX Directive.

Standard manual chain hoist and trolley models conform to and are marked for use as defined by ATEX designation:



These ATEX designations define the applications, the type and duration of the potentially explosive atmospheres, the type of protection, and the maximum surface temperature.

The **X** indicates that additional special conditions are required for safe application, operation and/or maintenance of these tools when used in potentially explosive atmospheres.

### NOTICE

- All Special Conditions must be followed for this product to conform to the ATEX Directive and for the ATEX Declaration of Conformity to be valid.

## Special Conditions for Safe Applications, Operations and Maintenance

### ⚠ WARNING

- Non-compliance with any of these Special Conditions could result in ignition of explosive atmospheres.
- Do not use the manual chain hoist or trolley when an explosive atmosphere is present.
- Immediately stop use of the manual chain hoist or trolley if an explosive atmosphere is detected, and place in a stable and secure position.
- Proper lubrication and maintenance are required to prevent premature component failures. Follow the recommendations in the lubrication and maintenance sections of the manual supplied with the hoist or trolley.
- The entire hoist system, from the trolley or load hook to the bottom hook, the hand chain and the payload shall be earth grounded at all times to prevent ignition hazards from electro-static discharge. A resistance to earth of less than 10000 Ohms is required. Do not disconnect or insulate any grounding or strain relief cables. When using a nonconductive sling or harness or a nonconductive link or barrier an independent ground must be applied.
- Do not install, remove or perform maintenance on the manual chain hoist without ensuring that an explosive atmosphere does not, and will not exist. It is recommended that a Work Permit System should be used that ensures that the atmosphere remains non-explosive during these operations.
- Never use a manual chain hoist or trolley when there is any possibility that a gas in Group C (acetylene, carbon disulfide, and hydrogen, as defined in EN 50014), hydrogen sulfide, ethylene oxide, light metal dusts or dusts sensitive to impact may be present. These atmospheres cause a high probability of explosion.
- Do not allow hard contact of the bottom block, hook, load chain, pendant control or trolley against other objects. The impact of any hoist or trolley component beyond normal use may cause an ignition hazard from sparks.
- The maximum expected surface temperature of the hoist or trolley is 50° C.

- Check for abnormally elevated temperatures during operation that may be an indication of overload or potential failure of bearings, brake or other mechanical components.
- If elevated temperatures or elevated vibration levels or unusual sounds are detected discontinue use of hoist and/or trolley until it can be inspected and/or repaired.
- Do not use a manual chain hoist or trolley that exhibits rust or rust films that may come in contact with aluminum, magnesium or their corresponding alloys.
- Do not perform maintenance or repairs in an area where explosive atmospheres are present.
- Do not clean or lubricate a manual chain hoist or trolley with flammable or volatile liquids such as kerosene, diesel or jet fuel. A potentially explosive atmosphere may be created.
- Hoists and trolleys with ATEX certification are intended for general industrial material handling use in conformance to their labeled designation and these special conditions. Special assessments, for other specific applications requiring increased protection, should be requested by written inquiry to Ingersoll Rand.

Explanation of ATEX Marking and Declaration of Corporation:

The European Directive 94/9/EC, commonly referred to as the ATEX Directive, requires manufacturers of products for use in potentially explosive atmospheres to assess their products to prevent them from creating an explosive atmosphere or from creating a source of ignition of an explosive atmosphere. The manufacture must certify that when the products are properly installed, maintained and used for their intended purpose, they do not endanger the health and safety of persons, animals or property.

The ATEX Directive recognizes that the probability of a serious event occurring varies with:

- the explosive properties of the atmosphere.
- the probability of the atmosphere being present.
- the probability of the machinery causing an explosive atmosphere.
- the probability of the machinery causing an ignition source.

It also recognizes the need for special conditions of installation and operation that must be followed to reduce or eliminate this potential for a serious event.

The ATEX Directive requires that the completed engine / machine be marked to indicate that it has been certified for use in potentially explosive atmospheres and to inform the user of limitation of use and special conditions of use.

An example of ATEX marking on a completed machine is:



- This symbol indicates certification for use in an explosive atmosphere and is followed by other symbols indicating the details of that certified use.

- II** - This indicates Equipment Group II - Non-Mine use.
  - 3** - Indicates Equipment Category 3 - Equipment in Category 3 is intended for use in areas in which explosive atmospheres caused by gases, vapors, mists or air/dust mixtures are unlikely to occur or, if they do occur are likely to do so only infrequently or for short periods. Protection is ensured during normal use.
  - G** - Indicated evaluation for explosive atmospheres caused by gases, vapors or mists.
  - D** - Indicated evaluation for explosive atmospheres caused by dust.
  - c** - Indicated evaluation per European Standard EN 13463-5 for Protection by Constructional Safety.
  - IIB** - (Optional marking) Gas Group - Gases are grouped by their MESG (maximum experimental safe gap) and MIC (maximum ignition current), with Group A being least explosive and Group C being most explosive. Certification for use in Group B includes Group A and covers gases with MIC ratio > 0.45 and MESG > 0.55mm.
- TMAX-The maximum surface temperature in degrees Centigrade calculated from the measured maximum temperature with corrections for ambient and a factor of safety.
- X** - Indicates that there are special conditions for safe application, installation, operation and maintenance all of which MUST be followed for the certification to apply.

**DECLARATION OF CONFORMITY**



(CS) PROHLÁŠENÍ O SHODĚ (DA) FABRIKATIONSERKLÆRING (DE) KONFORMITÄTSEKTLÄRUNG (EL) ΔΗΛΩΣΗ ΑΝΑΓΝΩΡΙΣΗΣ (ES) DECLARACIÓN DE CONFORMIDAD (FI) VAKUUTUS NORMIEN TÄYTTÄMISESTÄ (FR) CERTIFICAT DE CONFORMITÉ (HU) MEGFELELŐSÉGI NYILATKOZAT (IT) DICHIARAZIONE DI CONFORMITÀ (NL) SCHRIFTELIJKE VERKLARING VAN CONFORMITEIT (NO) KONFORMITETSERKLÆRING (PT) DECLARAÇÃO DE CONFORMIDADE (PL) DEKLARACJA ZGODNOŚCI (SK) PREHLÁSENIE O ZHODE (SL) IZJAVA O SKLADNOSTI (SV) FÖRSÄKRAN OM ÖVERENSSTÄMMESE

**Ingersoll-Rand**

**Hindley Green, Wigan WN2 4EZ, UK**

**Declare under our sole responsibility that the product: Manual Chain Hoists and Trolleys**

(CS) Prohlašujeme na svou zodpovědnost, že produkt: (DA) Erklærer som eneansvarlig, at nedenstående produkt: (DE) Erklären hiermit, gemäß unserer alleinigen Verantwortung, daß die Geräte: (EL) Δηλώνουμε ότι με δική μας ευθύνη το προϊόν: (ES) Declaramos que, bajo nuestra responsabilidad exclusiva, el producto: (FI) Vakuutamme ja kannamme yksin täyden vastuun siitä, että tuote: (FR) Déclarons sous notre seule responsabilité que le produit: (HU) Kizárólagos felelősségünk tudatában kijelentjük, hogy a termék: (IT) Dichiariamo sotto la nostra unica responsabilità che il prodotto: (NL) Verklaan, onder onze uitsluitende aansprakelijkheid, dat het produkt: (NO) Erklærer på ære og samvittighet at produktet: (PL) Przyjmując pełną odpowiedzialność, oświadczamy, że produkt: (PT) Declaramos sob a nossa exclusiva responsabilidade que o produto: (SK) Závazne prehlasujeme, že výrobok: (SL) Pod polno odgovornostjo izjavljamo, da je izdelek: (SV) Intygat enligt vårt ansvar att produkten:

**Model: VL2 and PT/GT / Serial Number Range: XXXX06**

(CS) Model: / Rozsah výrobních čísel: (DA) Model: / Serienummerområde: (DE) Modell: / Seriennummernbereich: (EL) Μοντέλο: / Κλίμακα σειριακών αριθμών: (ES) Modelo: / Números de serie: (FI) Malli: / Sarjanumeroalue: (FR) Modèle: / Gamme de numéros de série: (HU) Modell: / Gyártási szám-tartomány: (IT) Modello: / Gamma delle matricole: (NL) Model: / Serienummer: (NO) Modell: / Serienr: (PL) Model: / Zakres numerów serii: (PT) Modelo: / Gama de Nos de Série: (SK) Model: / Rozsah výrobných čísel: (SL) Model: / Območje serijskih števil: (SV) Modell: / Serienummer, mellan:

**To which this declaration relates, is in compliance with provisions of Directive(s): 98/37/EC (machinery), 94/9/EC (ATEX)**

(CS) Ke kterým se toto prohlášení vztahuje, odpovídají ustanovením směrnic: (DA) som denne erklæring vedrører, overholder bestemmelserne i følgende direktiv(er): (DE) auf das sich diese Erklärung bezieht, der folgenden Richtlinie entspricht: (EL) στο οποίο αναφέρεται αυτή η δήλωση, πληροί τις διατάξεις της Οδηγίας: (ES) a los que se refiere la presente declaración, cumplen con todo lo establecido en las directivas: (FI) johon tämä vakuutus viittaa, täyttää direktiiveissä: (FR) Objet de ce certificat, est conforme aux prescriptions des Directives: (HU) Amelyekre ezen nyilatkozat vonatkozik, megfelelnek a következő irányelvek előírásainak: (IT) a cui si riferisce la presente dichiarazione è conforme alle normative delle direttive: (NL) waarop deze verklaring betrekking heeft overeenkomt met de bepalingen van directieven: (NO) som denne erklæringen gjelder for, oppfyller bestemmelsene i direktivene: (PL) Którego dotyczy niniejsza deklaracja, jest zgodny z wymogami dyrektyw: (PT) Ao qual se refere a presente declaração, está de acordo com as prescrições das Directiva: (SK) Na ktorý sa toto prehlásenie vzťahuje, je v súlade s ustanoveniami Smernice (Smerníc): (SL) Na katerega se ta izjava o skladnosti nanaša, v skladu z določili smernic: (SV) Som detta intyg avser, överensstämmer med följande direktiv:

**By using the following Principle Standards: EN 1127-1; EN 13463-1; EN 13463-5; EN 50014**

(CS) Použitím následujících zákonných norem: (DA) ved at være i overensstemmelse med følgende hovedstandard(er): (DE) Unter Anlehnung an die folgenden Grundnormen entsprechen: (EL) Χρησιμοποιώντας τα παρακάτω κύρια πρότυπα: (ES) conforme a los siguientes estándares: (FI) esitetty vaatimukset seuraavia perusnormeja käytettäessä: (FR) En observant les normes de principe suivantes: (HU) A következő elvi szabványok alkalmazása mellett: (IT) Seguendo i principi standard indicati di seguito: (NL) overeenkomstig de volgende hoofdstandaards: (NO) Ved å bruke følgende prinsipielle standarder: (PL) Spełniając wymogi następujących głównych norm: (PT) observando as seguintes Normas Principais: (SK) Pri dodržaní nasledovných noriem: (SL) Uporabljeni osnovni standardi: (SV) Genom att använda följande principstandard:

**Date: October, 2006**

(CS) Datum: Říjen 2006: (DA) Dato: Oktober, 2006: (DE) Datum: Oktober, 2006: (EL) Ημερομηνία: Οκτώβριος, 2006: (ES) Fecha: octubre, 2006: (FI) Päiväys: Lokakuu, 2006: (FR) Date: octobre, 2006: (HU) Dátum: 2006 Október: (IT) Data: ottobre, 2006: (NO) Dato: Oktober, 2006: (NL) Datum: Oktober, 2006: (PT) Data: outubro, 2006: (PL) Data: październik 2006: (SK) Dátum: Október 2006: (SL) Datum: oktober 2006: (SV) Datum: Oktober, 2006:

**Approved By:**

(CS) Schválil: (DA) Godkendt af: (DE) Genehmigt von: (EL) Εγκρίθηκε από: (ES) Aprobado por: (FI) Hyväksytty: (FR) Approuvé par: (HU) Jóváhagyta: (IT) Approvato da: (NL) Goedgekeurd door: (NO) Godkjent av: (PL) Zatwierdzone przez: (PT) Aprovado por: (SK) Schválil: (SL) Odobril: (SV) Godkänt av:

*John I. Perkein*

**Engineering Product Manager**

